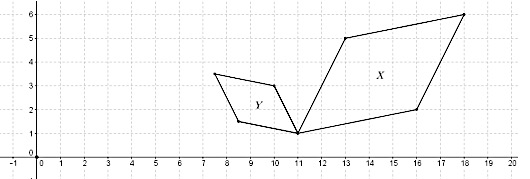
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

CW 53: Determining Dilations

**Honors Geometry**

1. How do you know when a dilation has occurred?
2. What type of figures are produced by a dilation?
3. ****Suppose you were given a pre-image (Y) and an image (X), what are some strategies could you use to determine if a dilation occurred between them?

Directions: Determine if a dilation occurred from each pre-image 🡪 image. If yes, describe the dilation.

|  |  |
| --- | --- |
| **../../../../../Desktop/Problems/problem%205.png**  D’’  C’’  B’’  A’’  D  C  B  A | **../../../../../Desktop/Problems/problem%206.png**  D’’  C’’  B’’  A’’  D  C  B  A |
| **../../../../../Desktop/Problems/problem%207.png**  D’’  B’’  C’’  A’’  D  C  B  A | **../../../../../Desktop/Problems/problem%208.png**  D’’  C’’  B’’  A’’  D  C  B  A |

Say you were given the coordinates of a pre-image (X) and image (Y) instead of a graph. What are some strategies you could use to determine if a dilation occurred?

Determine if a dilation occurred from ABC 🡪 A’’B’’C’’

A(0,2) 🡪 A’’(2.5,-1)  
B(3,0) 🡪 B’’(3.5,2)  
C(-1,0) 🡪C’’(3.5,-2)

Determine if a dilation occurred from DEFG 🡪 D’E’F’G’

D(-1,2) 🡪 D’’(-1.5,-3)  
E(3,2) 🡪 E’’(-3.5,-3)  
F(0,0) 🡪 F’’(-2,-1)  
G(0,-2) 🡪 G’’(-2,1)

Determine if a dilation occurred from HIJK🡪 H’’I’’J’’K’’

H(-1,2) 🡪 H’(-3,1.5)  
I(3,2) 🡪 I’(-3,-6)  
J(0,0) 🡪 J’(-6,-1.5)  
K(-2,0) 🡪 K’(-6,1.5)

Determine if a dilation occurred from LMN 🡪 L’M’N’

L(-1,2) 🡪 L’(-3,1.5)  
M(3,2) 🡪 M(-1,1.5)  
N(0,0) 🡪 N(-2.5,-1.5)